

**Planning for Community:  
Adaptive Reuse and Urban Infill  
in Indianapolis, Indiana**

**An Honors Thesis (PLAN 202)**

**by**

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A handwritten signature in black ink, reading "Vera Adams", with a long horizontal flourish extending to the right.

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# Abstract

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Urban areas are all around us. It is likely that we will all live in one at some point in our lives. Many planners and designers focus on the development of urban areas as centers for living, working, and enjoying. In Indianapolis, Indiana, there are many prime locations for new investment. Choosing to revitalize areas that are already developed encourages growth in the heart of the city where large investments in infrastructure have already been made. In this way, redevelopment can save money and reduce the impact of new uses on the land. Focusing on infill and the reuse of existing structures, I have created a redevelopment plan for a historic site along Massachusetts Avenue by conducting an analysis of current issues and opportunities and formulating three objectives as design solutions.

# Acknowledgements

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I would like to thank Vera Adams for being both my thesis advisor and instructor. You pushed me to do the best work possible in class and always provided valuable, constructive feedback.

I would like to show gratitude toward my many friends and studio colleagues who have enriched my education by sharing their input on a daily basis and providing a constructive atmosphere where ideas like these can be shared.

Finally, I thank my parents for providing the love and support necessary to make it this far.

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# Author's Statement

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This project is as an example of some of my best work completed during my undergraduate education at Ball State University in the Department of Urban Planning, College of Architecture and Planning. It serves as a capstone to my Honors experience and represents my ability to think holistically about problems and their solutions.

Originally a component of the PLAN 202 urban site planning and design studio under the instruction of Vera Adams, this project deals primarily with the issues of site design as it relates to urban infill and the reuse of structures, both historic and contemporary. The refurbishment of existing buildings with new uses is called "adaptive reuse". Through this project, I show how an underutilized area within an urban neighborhood can be redeveloped to create a lively center while preserving the history and character of the current buildings.

The idea of revitalizing an older urban neighborhood should be considered not only by city officials and urban designers but also everyday citizens. Urban areas are the historical centers of our society; these are the places where inventions were made, industries were born, and generations of families were raised. These areas have already seen the investment of expensive infrastructure. Why should we build new developments outside of the urban area, having to put invest in new infrastructure, when we could instead utilized what has already been built? For this reason, we should always consider our built environments with the respect and level of attention they deserve. Projects like this one show what is possible when we do not get caught up in "what is" but when we focus our vision toward "what could be."

For the planner and urban designer, both text and images are important tools in communicating a design and development idea. Writing a report of current issues, goals, and solutions provides the detailed basis of the development proposal. Images are the medium by which we can explain the concepts of a plan and an indication of how the environment will appear when it has been implemented.

A site plan is a large and comprehensive visual overview of the layout of the proposed plan and explains the general layout of different uses within the site. In

this project, I have rendered the site plan to show the uses of the buildings using a standard color-coding system.

Perspective views of the site show the three-dimensional, real-world relationships between spaces by better illustrating heights and volumes of buildings and spaces. Here, the perspective views have been rendered using a three-dimensional computer rendering program to create a more realistic image, complete with simulated lighting.

Third, sections help explain the nature of spaces both inside and outside of buildings. These sections are essentially slices cut out of the site to illustrate what is happening in a given area. These more specific spaces are also further elaborated by the use of more focused perspective images.

Fourth, a written program details the numbers behind the project. In this situation, the program details the number of units and square footage of each building use within the redevelopment proposal. These numbers can be used to calculate the general costs of the project as well as the financial feasibility for the owner, developer, and operator. A readjustment of these numbers will cause a change with the plan.

This project is an even balance of analysis, problem solving, and creativity and design. I believe it is important to find the middle ground between these three aspects in all of my work because it yields results that are both detailed and well thought out but also easy to comprehend. This Honors capstone is no different.

# Introduction

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In the urban core of Indianapolis, Indiana, the northeast terminus of Massachusetts Avenue (a.k.a. Mass Ave) is plagued with many problems. The area is underutilized and unsightly from many angles. It has poor connections and relations to the surrounding neighborhood. Despite the issues, opportunities are abundant. A former Coca-Cola bottling plant still stands here, complete with original detailing and character that make it a treasure of the city. Surrounding buildings are equally historic. Immediately adjacent to the historic properties are signs of new market investment through modern residential and retail spaces. These indications of growing demand within the area demonstrate an already-existing atmosphere of revitalization. To take advantage of this wave of reinvestment and rise to the challenges this site presents, current conditions must be analyzed and an objective-driven process outlined. As a result of the process, a redevelopment plan will be created.

# Existing Site



Fig. 1: The context of the site within Indianapolis, Indiana.

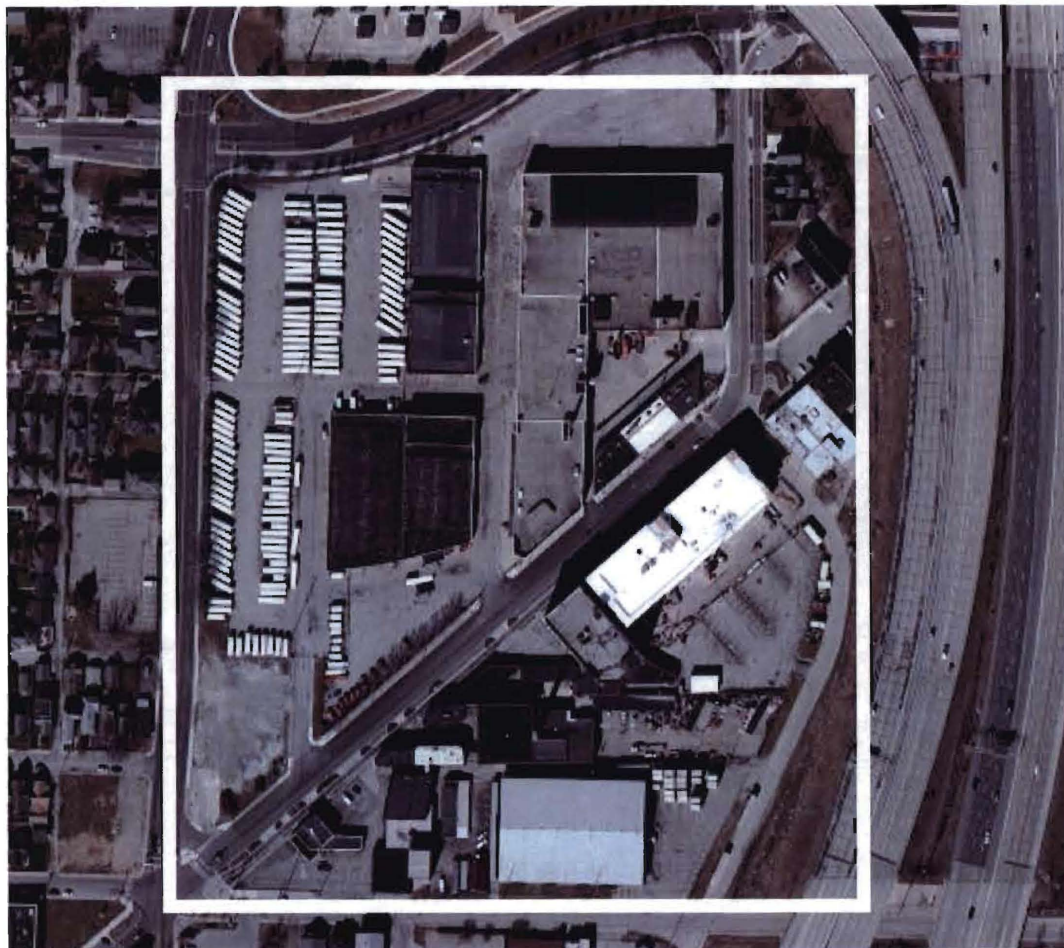


Fig. 2: The site as it currently exists.

Source: Bing Maps ([bing.com/maps](http://bing.com/maps))





Fig. 3: Street level of the main Coca-Cola building.



Fig. 4: Original signage still exists on the historic buildings.



Fig. 5: The underutilized southwest corner of the site is an eyesore.



Fig. 6: Much of the interior features the original interior details.



Fig. 7: The main entrance off of Massachusetts Avenue.



Fig. 8: Much of the interior is an open concept layout.





Fig. 9: The lower level of the main building.



Fig. 10: Looking northeast down Massachusetts Avenue toward the Interstate. A recent extension of the Indianapolis Cultural Trail can be seen running along the street's edge.



Fig. 11: Looking southwest toward downtown Indianapolis with a view of the skyline.

# Problems & Opportunities

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As it currently exists, many portions of the site are underutilized. The southwest corner of the site, at the intersection of College and Mass Ave, sits entirely vacant, as seen in Figure 5. It is, for all visual purposes, a rejected wasteland of gravel and unsightly vegetation. This is not only unacceptable for any lot within an active urban center, especially one in such a prominent and visible location, but a waste of perfectly valid and valuable real estate. The Mass Ave corridor, a hot area of commercial and social activity, is negatively impacted by dead spaces such as these.

Another problem lies in the use of the site. The historical Coca-Cola buildings are currently occupied by the Indianapolis Public Schools (IPS) as a transportation, storage, service, and distribution hub. While there is nothing wrong with a property being used in this fashion, it is not the best use for this specific site. If IPS were to relocate, the Coca-Cola site and surrounding properties could be reinvigorated with new investments responding to market demand that is more appropriate to the neighborhood.

The southeast side of Mass Ave is more diverse in terms of development patterns. A Mayflower moving company location is on the southeastern end of the site; They occupy some of the existing brick buildings as offices as well as a large steel warehouse behind. Many of the other older brick buildings on this side of the street appear to be vacant or underutilized spaces with the exception of a couple, including an art gallery and the Center Township Trustee.

Directly across the street from the main Coca-Cola building is a newly-constructed mixed-use project containing both residential units and retail spaces. Adjacent to the Coke building is a small one-story retail strip currently occupied by several small businesses. These two retail strips are the only ones that serve the neighborhood's apartments, few single family residences, and office spaces at this end of the avenue. Increasing the retail options on this end would encourage greater pedestrian traffic and would better match the retail/mixed use character of the rest of the corridor.

Interstate 65/70 through downtown Indianapolis presents a large problem in terms of neighborhood connectivity because it limits the connections between



the west end of Mass Ave, the part analyzed in this project, and the remainder of Massachusetts Avenue to the east. The street has to break away from its strong linear diagonal to reroute under the Interstate. This creates an awkward piece of street at the end that has essentially turned into a parking lot as well as the unsightly visual termination of the street into a grassy embankment. (*see Figure 2*)

Despite all of the current problems, the site, at such a great location, has a lot of potential. The historic Coca-Cola buildings are beautiful with their preserved architectural details, both interior and exterior. (*see Figures 3, 4, & 6*) The main building's grand lobby entrance is a gem and could easily serve as the entrance to a new use. (*see Figure 7*) The small brick buildings and brick pavers on the southern portion of the site are full of character and would provide charm to new development there. The newer mixed-use project across the street from the Coke building has the potential to incorporate into a new redevelopment plan along with the current retail strip and the few existing residences. Additionally, a new leg of the Indianapolis Cultural Trail runs through the site connecting to the Monon Trail on the other side of the Interstate. (*see Figure 10*) This network provides additional opportunity for site access. To support possible new street-level retail as well as current retail stock within the area, the redevelopment plan should significantly increase the residential count within the area; this will result in the creation of a new residential neighborhood on this site.

# Solutions

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The site redevelopment solution outlined here will be summarized in three main objectives. First, a better sense of place needs to be established respecting the qualities of Mass Ave. Second, existing buildings should be reused and adapted to new uses that fit within both physical spaces and social character, preserving the historical pieces of Indianapolis. Third, a variety of housing options must be incorporated to create an inclusive and nurturing residential neighborhood.

## Objective One—Sense of place

An important aspect of the redevelopment proposal is to strengthen and, in some places, rebuild the urban street wall. A street wall is important in an urban environment because it helps to create comfortable spaces for the pedestrian; it is a defining characteristic of an urban place. Locating active uses such as retail spaces along the street reinforces the importance of commercial activity in the city and increases the sociability of spaces through increased pedestrian use. New retail spaces have been added on the southwest corner in a mixed-use structure to complement the existing retail. (*see Figure 21, last page*) This multi-story building will help enclose the intersection of Mass Ave and College Avenue and mirror the pattern of buildings along other sections of the street.

In front of this new multi-story building, the awkward terminus of Mass Ave into the highway has been reworked to celebrate Mass Ave's unique diagonal presence. Looking down the street toward the downtown is an amazing experience. Unlike typical grid streets, the view is terminated into a skyline of buildings. (*see Figure 11*) On the other hand, looking down the street away from downtown is a much less impressive experience. This new redevelopment plan places two new residential structures at the end of this axis to enclose the space and create a similar effect to the terminated vista that the downtown provides. (*see Figure 15, page 24*) The new structure directly centered on Mass Ave has an undulating roof line reflecting the downtown skyline opposite. This structure will also provide residential units with great views to the west.

The terminus of the street, now defined by these new residential buildings, has been reinforced with a roundabout. While the access road that currently intersects there has been removed in this plan, the roundabout still serves a function

as both a visual terminus to the avenue. Additionally, drivers coming down the street looking for an open space to park can now easily circle around and head back down the avenue without the need to take a more circuitous detour. (see *Figure 15*)

This plan also proposes a unique but powerful pavement pattern by which both sides of Mass Ave are visually “tied together” to reduce the physical and visual disconnect that may be created by the diagonal avenue. (see *Figures 13 & 17*) Coca-Cola’s trademark, already incorporated on the sides of the old bottling plant, will be reflected in this “dynamic ribbon” design. This ribbon serves a secondary purpose of defining spaces. The continuation of the ribbon on the south side and transformation into larger curves helps distinguish public, semi-public, and more private areas from one another.

## Objective Two—Adaptive reuse

The second goal is to reuse the site’s existing buildings to save the heritage of Indianapolis as well as reduce the overall environmental impact of new development. Almost all of the current buildings and structures have been reused and adapted in the new plan, including the steel warehouse. Beginning with the Coca-Cola buildings themselves, the redevelopment plan proposes to adapt them into residential-only uses. The center of the large building has been “punched out” to create a courtyard. Currently, the ground level in this section of the building is already occupied by an auto garage-type area for loading and unloading and will therefore be easily repurposed as an outdoor space. This courtyard area would create the opportunity for semi-private space as well as walk-up residential apartments.

The main Coke building has been divided into apartment units all accessible from an interior corridor with main access right on Mass Ave through the restored lobby entrance. The two smaller Coke buildings to the west of the larger one have also been reused as residential only spaces. The large Coke garage, currently being used as the IPS maintenance garage, has been reused and adapted for a community space. This large interior dominated by great ceiling trusses makes for a great worship space as well. Spaces for classrooms could be incorporated into the

new community space as well as an interior recreation area such as a basketball court/multipurpose room.

On the southeastern portion of the site, approximately half of the building space has been adapted into new residential live-work units to create a residential artist village. The other half of the buildings have been adapted as more traditional apartments. Because it is a shell structure similar in type to larger retail stores, the steel Mayflower building could be fitted as a local anchor fresh foods grocery and goods store. Rehabbed and partially re-skinned, this structure sees new life as a centerpiece of the surrounding residential areas.

Just north of the new fresh grocer is the current Township building which remains along with the three-story brick building at the end of Mass Ave. This brick building has been adapted into office space positioned between the two new residential buildings creating the opportunity for an employee to live next door to his/her employer, commuting to work on foot.

### Objective Three—New residential infill

The third and final goal for this redevelopment plan is to incorporate a wide variety of housing options and residential spaces to attract a diverse set of individuals and families. The existing Coca-Cola buildings have been reused as multi-family structures. The largest building is divided into apartment spaces, some walk-up, most corridor access, with a central courtyard space. Units in this building range from 900 to 1300 square feet. This provides an opportunity for spacious 1, 2, and 3 bedroom units. The two smaller adjacent buildings have been adapted as ground floor loft units. Existing windows and ceiling trusses act to naturally divide the units in each building.

Because the site is adjacent to a largely single-family home neighborhood to the west, a transitional space is needed between it and the multifamily structures of the Coca-Cola complex to preserve the neighborhood context on both sides of College Ave. The redevelopment plan offers two-story townhomes along College Avenue to create the undulating street-front appearance of traditional single-family dwellings while allowing for higher densities. (*see Figures 13 & 14*)

These townhomes also provide the convenience of direct street entry in addition to the space and privacy of individual back yards. Creating a space where even suburban families would love to call home is important when looking to diversify the neighborhood.

In addition to the adaptive and new multi-family units on the north side of Mass Ave is the unique artist village. The existing brick buildings have been reused as both live-work loft units and apartments. (*see Figure 20, last page*) The live-work units are spaces of varied square footage that provide not only a place to live but a space to work as well. Ground floor potential exists for both retail and office space depending on the resident's needs. Some units are designed for the needs of single artists, featuring open, re-configurable spaces and accessibility to the street's foot traffic if an in-home gallery is desired. Other units cater to families with easy access to play areas as well as the grocery store. Directly to the south of these units are the adapted two-level apartments. The upper three levels of the building provide apartments in the 800-1000 square foot range, perfect for a two-bedroom unit. This building provides great views from each unit in addition to being in an advantageous location for an urban dweller.

# Program

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As a whole, there are 365 total residential units on site, a majority being apartments, followed by townhomes, lofts, and live-work lofts. There is a total of 57,200 square feet of retail space on the site, 33,000 of which is the grocery store in the adapted warehouse structure. The other half of the total retail space is distributed along the Mass Ave street wall. There is 11,025 square feet of office space, almost half of which is located in the corridor building at the end of Mass Ave; the rest is located with street frontage for flexible usage. Community functions are contained under one roof in the adapted Coca-Cola garage structure. At 43,000 square feet, there is plenty of space for worship services, self-help classes, art workshops, and indoor recreation during the colder months.

Parking has been distributed across the site to avoid seas of impervious material. The townhomes have parking located right behind each unit to provide the convenient access that a single-family home purchaser wants while allowing a more efficient use of the space by increasing density. Other residential parking is located behind the new apartment to the east, north of the grocery. Most of the residential parking, however, is located in the adapted lower level of the main Coca-Cola building. These 210 spaces are accessible through an entrance ramp added to the north side of the main building along an access drive. This is not only for the units in the main building itself but also the adjacent lofts and apartments across the street.

Retail parking is accounted for on-site with a lot to the east of the grocery. In addition, the community space can utilize this lot through an improved pedestrian connection across Mass Ave. The rest of the retail and general parking is distributed around the site as on-street parking. In total there are 678 spaces on the site. The parking lot for the grocery store and community center could later be converted to a parking structure if the need arises due to its general size and location. For more program details, see Figure 12 next page.

<b>Residential</b>		<i># Units</i>
<b>Live-Work Lofts</b>		<b>24</b>
	Live-Work Artist Village	24
<b>Adaptive Reuse Lofts</b>		<b>30</b>
	Village Lofts	2
	Coke Lofts	28
<b>Townhomes</b>		<b>45</b>
	College St. Townhomes	45
<b>Apartments</b>		<b>266</b>
	Adaptive Reuse Apartments 800-1300sqft	110
	East	28
	Northeast	63
	Village Apartments	14
	SW Corner Mixed-Use	51
<b>Total Units</b>		<b>365</b>

<b>Retail</b>		<i>SqFt</i>
<b>Ground Floor Shops</b>		<b>24200</b>
	Existing Coke Retail	8000
	Village North	3000
	SW Corner Mixed Use	13200
<b>Grocery Store</b>		<b>33000</b>
	Adaptive Reuse Warehouse	33000
<b>Total SqFt</b>		<b>57200</b>

<b>Office</b>		<i>SqFt</i>
<b>Corridor Building</b>		<b>4125</b>
	Interstate Building	4125
<b>Street Front</b>		<b>6900</b>
	SW Corner Mixed-Use	3800
	Village Street-Frontage	3100
<b>Total SqFt</b>		<b>11025</b>

Fig. 12: Details of the program.

Community		SqFt
Interior		<b>43000</b>
	Worship Space/Indoor Rec/Class	43000
		Total SqFt
		<b>43000</b>

Parking		# Spaces
Lot- Covered Garage		<b>210</b>
	Coke Lower Level	210
Lot- Uncovered		<b>323</b>
	Townhome Lot	90
	Village Lots (2)	26
	Grocery Lot	123
	East Lot	84
Street		<b>145</b>
	Street- Full Size	133
	Street- Moped/Motorcycle	12
		Total Spaces
		<b>678</b>

(Fig. 12 continued)



# Summary

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In summary, the Coca-Cola bottling site on Mass Ave, despite current drawbacks, is full of potential. Although seemingly neglected now, there is so much life left in this part of Indianapolis; existing redevelopment momentum in the area can be tapped to revitalize this site, and in turn, this neighborhood. To create a unique neighborhood infill project, three objectives were met. First, a sense of place was reinforced through the strengthening of the street wall, the definition of a new beginning and end for Mass Ave, and a dynamic paving pattern celebrating the history of the Coca-Cola property. Second, the existing buildings were reused and adapted for new uses, integrated into a new plan, and respected for their current architectural character. Third, a variety of housing types and spaces were incorporated to maintain diversity.

This redevelopment plan provides a place for all different uses, spaces, activities, individuals, and families. Here, these elements are celebrated for what they are individually but also combined with craft and care. Just like a painting combines different colors to create a beautiful scene, these individual elements come together to create a neighborhood that is meaningful and long-lasting.

# Site Plan

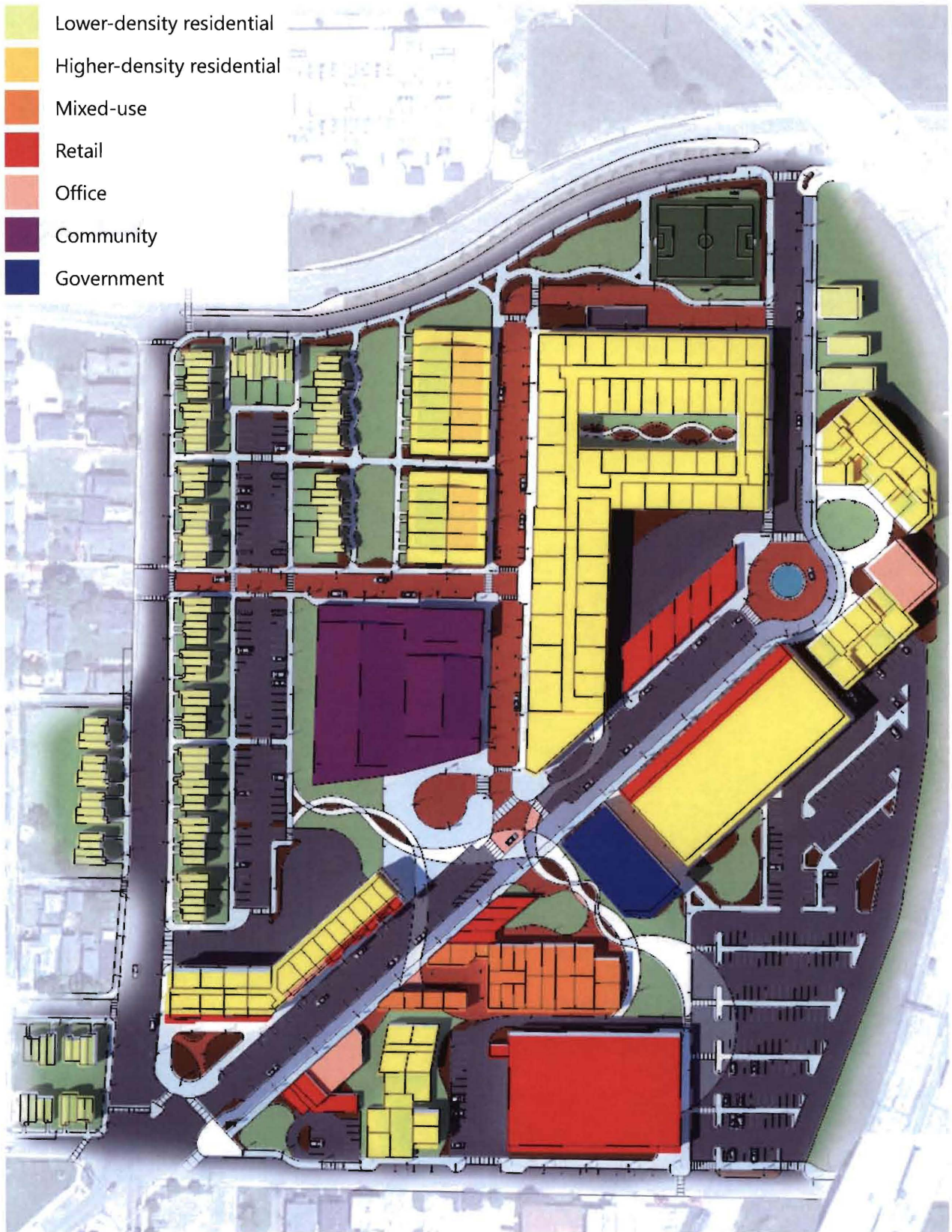


Fig. 13: The proposed site plan. Building uses are indicated by color. Lines drawn atop buildings represent the separation of units.



Fig. 14: The Mass Ave corridor is alive with energy and activity after infill development.



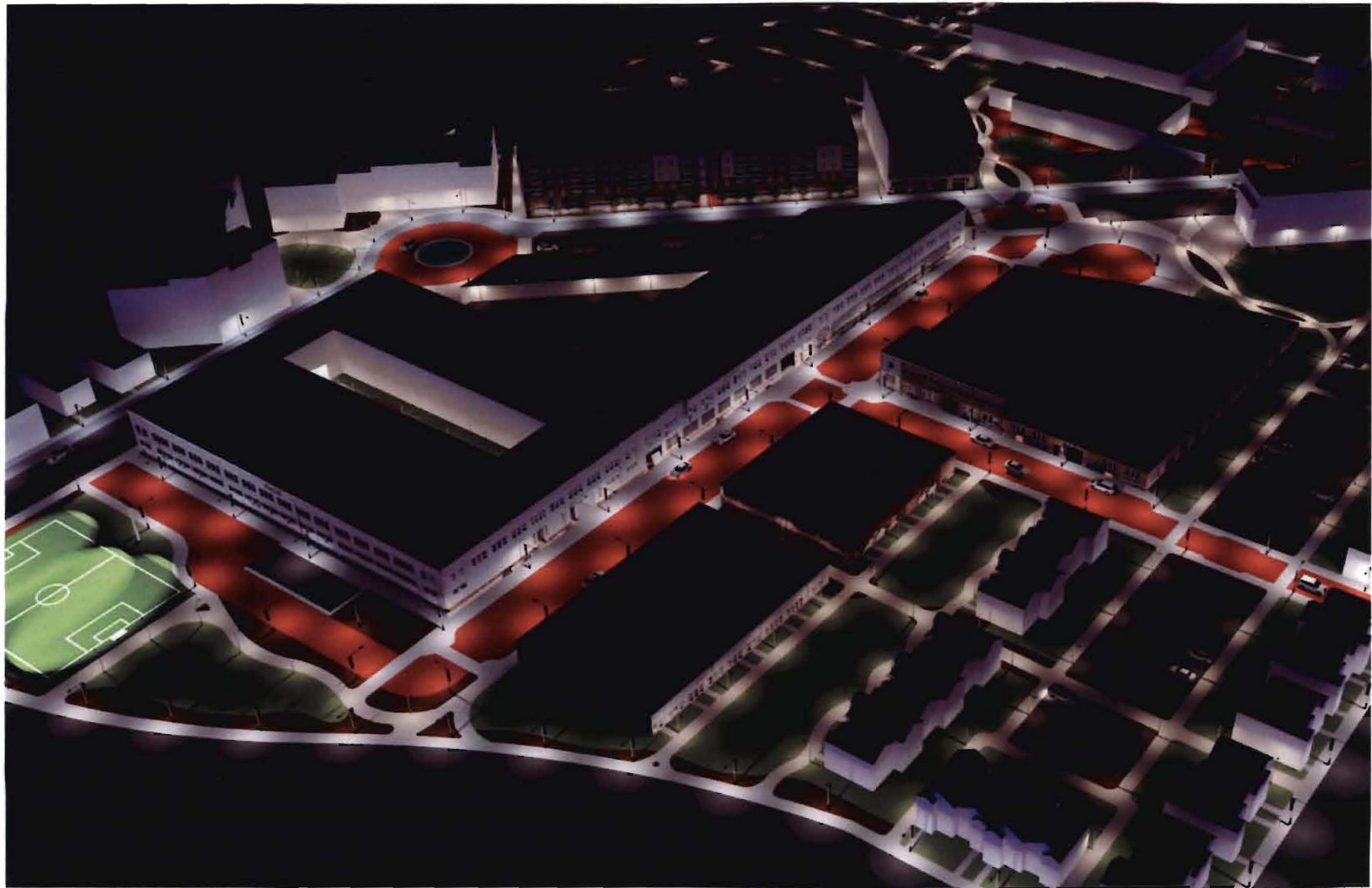


Fig. 15: A youth soccer field in the northern corner of the site can be easily accessed by the apartments, lofts, and townhomes on site.



Fig. 16: Pedestrians feel safe at night walking in a well-light neighborhood.

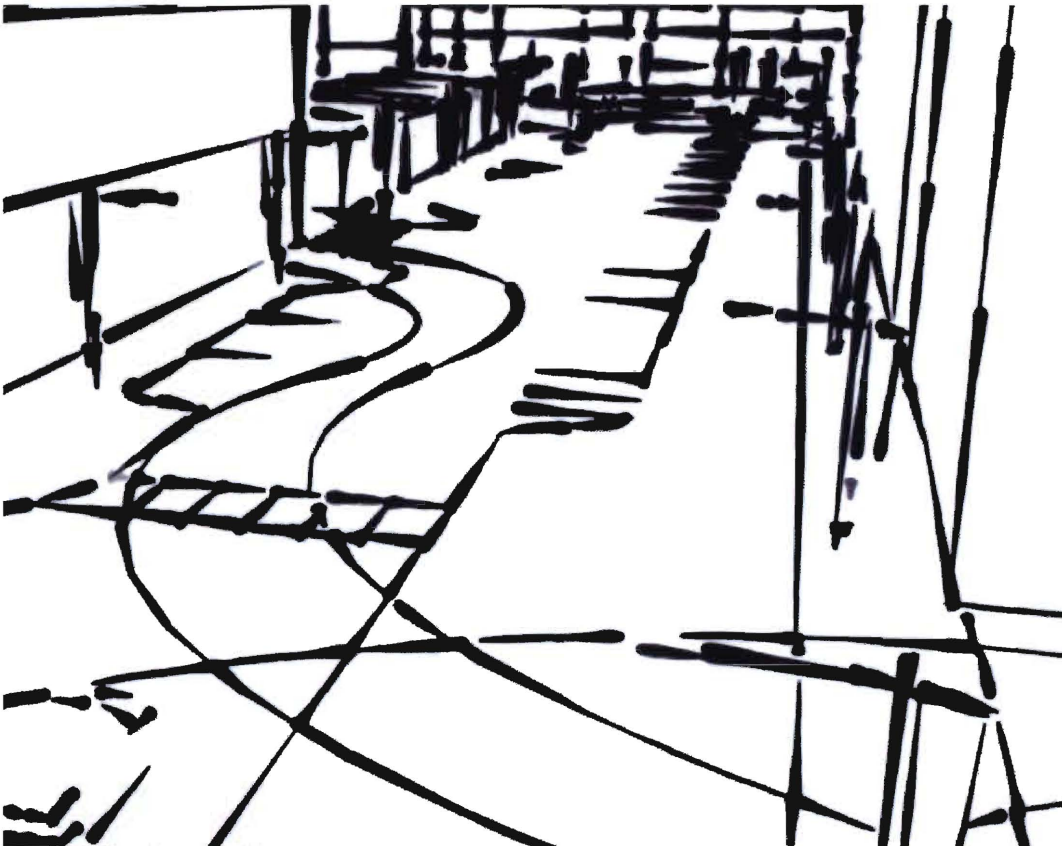


Fig. 17: The dynamic ribbon pavement pattern.

# Sections

The following sections illustrate the spatial relationships between different areas of the proposed site plan.



Fig. 18: Children play soccer at left adjacent to the apartments within the main Coca-Cola building.

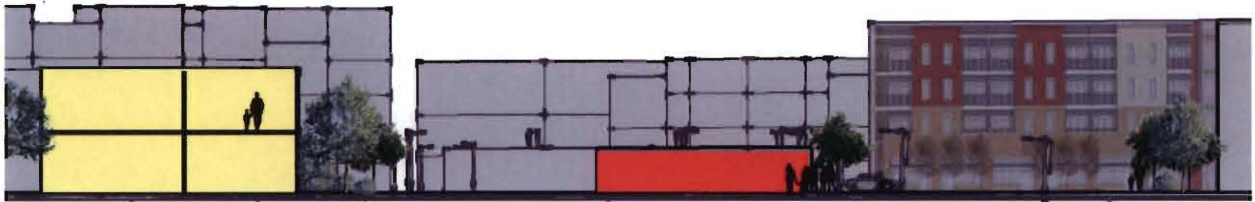


Fig. 19: New development can be seen in the background adjacent to the existing retail (red) and apartments within the main Coca-Cola building (yellow). The existing mixed-use project is on the right.

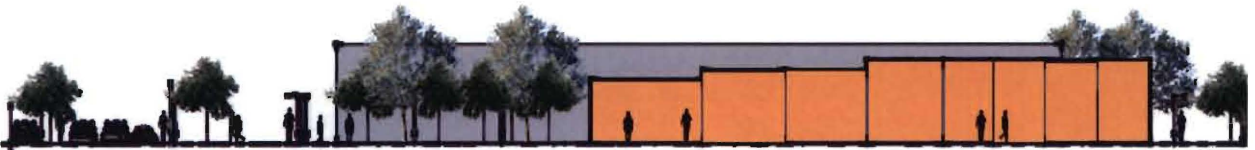


Fig. 20: Live-work lofts in the artists village.

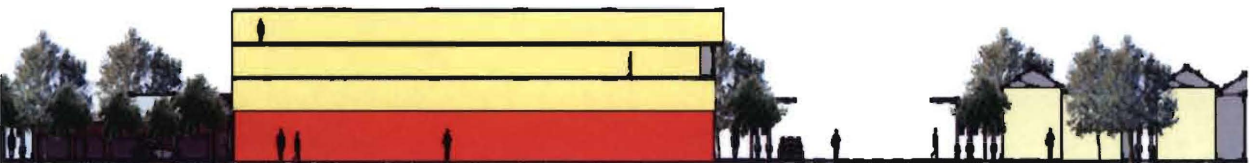


Fig. 21: New mixed-use development maintains a low profile to reduce impact on the surrounding neighborhood. Townhomes are on the right.